

CleanSeaNet – European Satellite Oil Spill Monitoring and Vessel Detection Service

Overview of CSN Web Portal

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SAFEMED III Training for CleanSeaNet Operators – Lisbon– March 2014

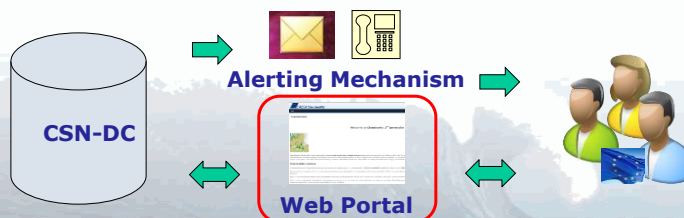
The CSN Web Portal

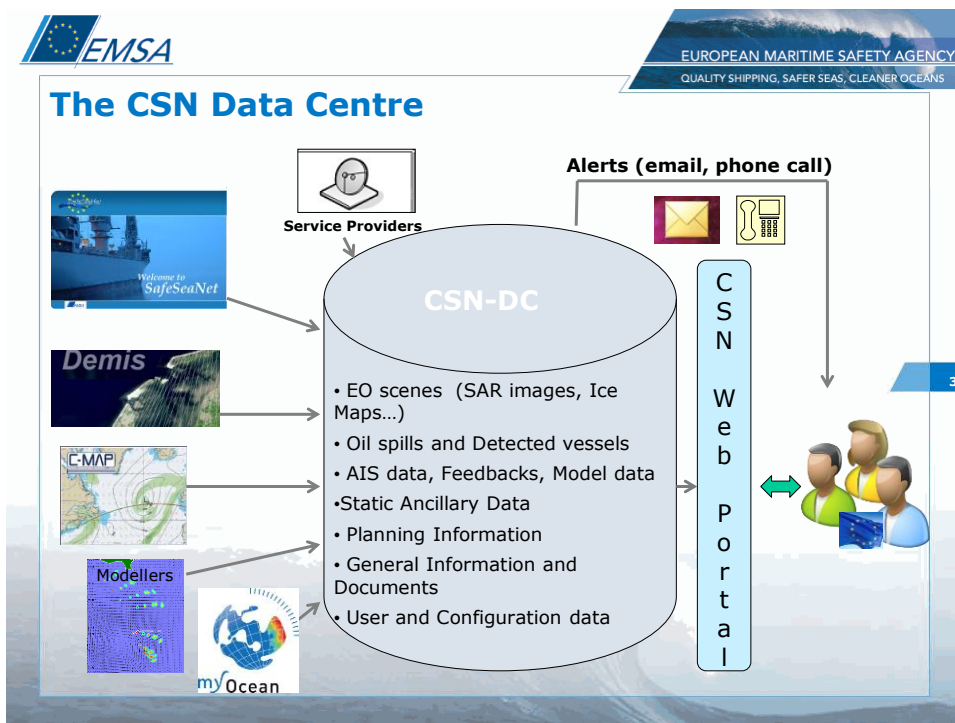
- Two independent ways of distributing the service results

- The **CSN Web Portal** at:
<https://csndc.emsa.europa.eu/group/cleanseanet/homepage>

- The **CSN Alerting mechanism** by:
 - Alert phone calls performed by EMSA 24/7 MSS Duty Officers (optional)
 - Alert emails containing pdf documents -> the alert reports

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CSN Web Portal

- **Integrated Interface for all CSN activities:** planning, allocation, feedback, image & spill/vessel data, ancillary data, product subscription, user configuration, forum, etc.
- **High configurability:** users can define
 - alert areas and alert levels
 - communication matrix,
 - details of report content
 - user profiles (map extent, tabular view, data subscription)
- **User Management:**
 - Coastal States can create users autonomously
 - There are different user roles, which have access to different functionalities

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EMSA

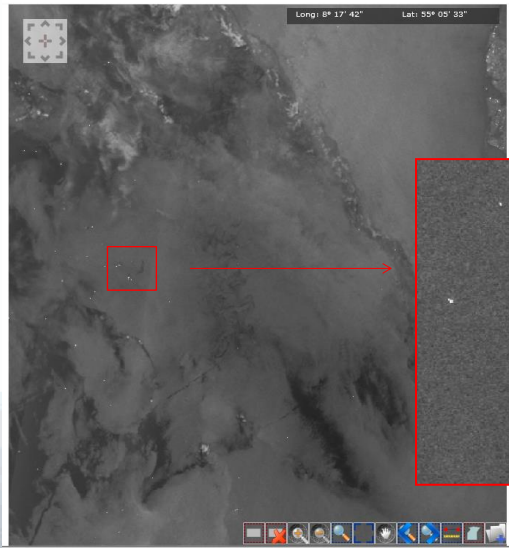
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CSN Web Portal

Main features

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- Implements algorithms to improve image visualization (normalization + speckle filtering)
- And to correct the displacement of SAR images



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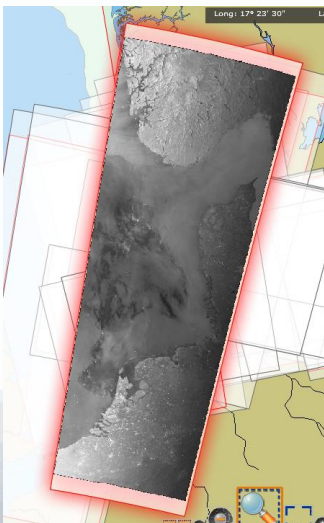
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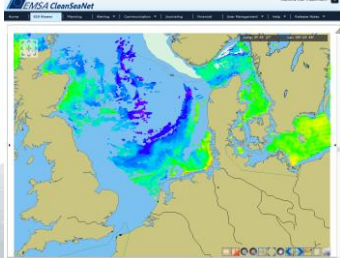
CSN Web Portal

Main features

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- Provides different means of data distribution: ftp transfer, download of high resolution SAR image and oil polygon
- Variable length image segments
- Integration of Meteo Oceanographic data from the MyOcean data provider: Chlorophyll, SST, Sea ice, Currents



CSN Web Portal

Main features

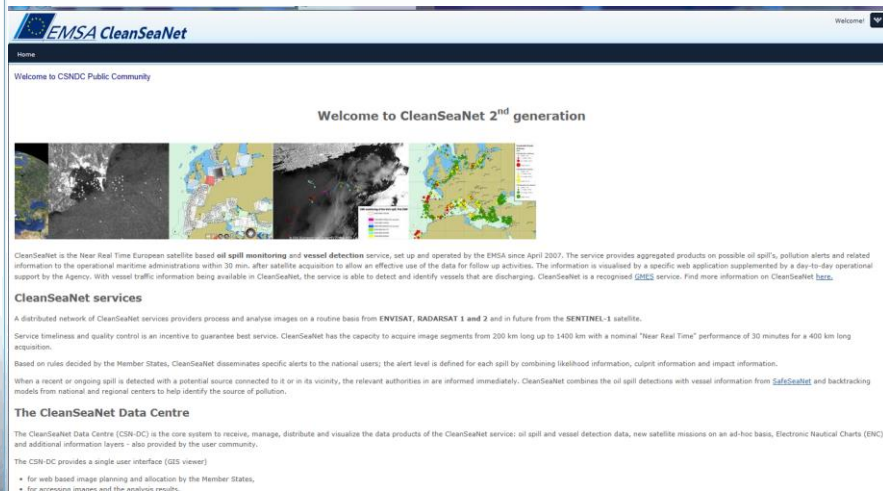
- Makes available as background Electronic Nautical Charts/information and DEMIS topography layers as possible background maps
- System capable to ingest further satellite data (e.g. TerraSAR, CosmoSkymed, MODIS, ...)
- Improved Search capabilities:
Possibility to search by using for e.g.
 - Geographical criteria
 - Time windows
 - Type of image
- Possible to search for images, oil spills, vessels, feedbacks.
- Communication platform available



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CSN Web Portal

<https://csndc.emsa.europa.eu/group/cleanseanet/homepage>



EMSA CleanSeaNet

Welcome to CSNDC Public Community

Welcome to CleanSeaNet 2nd generation

CleanSeaNet is the Near Real Time European satellite based oil spill monitoring and vessel detection service, set up and operated by the EMSA since April 2007. The service provides aggregated products on possible oil spill's, pollution alerts and related information to the operational maritime administrations within 30 min. after satellite acquisition to allow an effective use of the data for follow up activities. The information is visualised by a specific web application supplemented by a day-to-day operational support by the Agency. With vessel traffic information being available in CleanSeaNet, the service is able to detect and identify vessels that are discharging. CleanSeaNet is a recognised [GSS](#) service. Find more information on [CleanSeaNet](#) [page](#).

CleanSeaNet services

A distributed network of CleanSeaNet services provides process and analyse images on a routine basis from **ENVISAT, RADARSAT 1 and 2** and in future from the **SENTINEL-1** satellite.

Service timeliness and quality control is an incentive to guarantee best service. CleanSeaNet has the capacity to acquire image segments from 200 km long up to 1400 km with a nominal "Near Real Time" performance of 30 minutes for a 400 km long acquisition.

Based on rules decided by the Member States, CleanSeaNet disseminates specific alerts to the national users; the alert level is defined for each spill by combining likelihood information, culprit information and impact information.

When a recent or ongoing spill is detected with a potential source connected to it or in its vicinity, the relevant authorities are informed immediately. CleanSeaNet combines the oil spill detections with vessel information from [SafeSeaNet](#) and backtracking models from national and regional centers to help identify the source of pollution.


The CleanSeaNet Data Centre

The CleanSeaNet Data Centre (CSN-DC) is the core system to receive, manage, distribute and visualize the data products of the CleanSeaNet service: oil spill and vessel detection data, new satellite missions on an ad-hoc basis, Electronic Nautical Charts (ENC) and additional information layers - also provided by the user community.

The CSN-DC provides a single user interface (GIS viewer)

- for web based image planning and allocation by the Member States,
- for accessing images and the analysis results.

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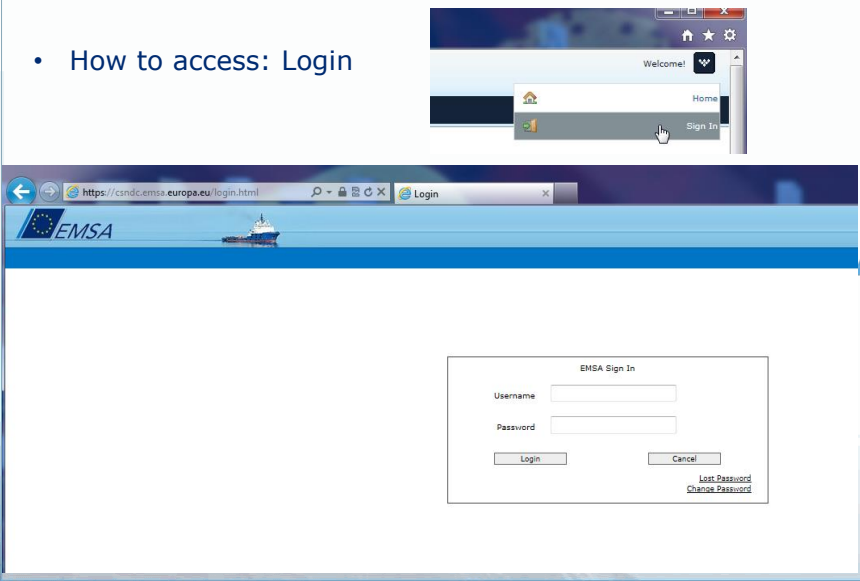


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- How to access: Login



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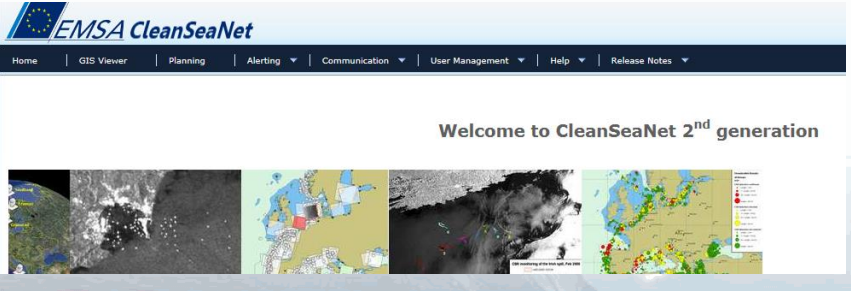
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CSN Web Portal

Components visible to the CS users are:

- GIS - Viewer (with Feedback provision)
- User Management
- Alerting component
- Planning and ordering interface
- Communication component



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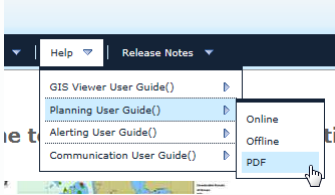
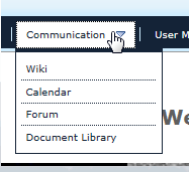
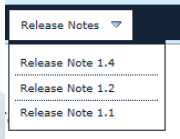
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Entrance Points for a new user or when you have a problem are:

- User Guides
- Release Notes
- Communication Component

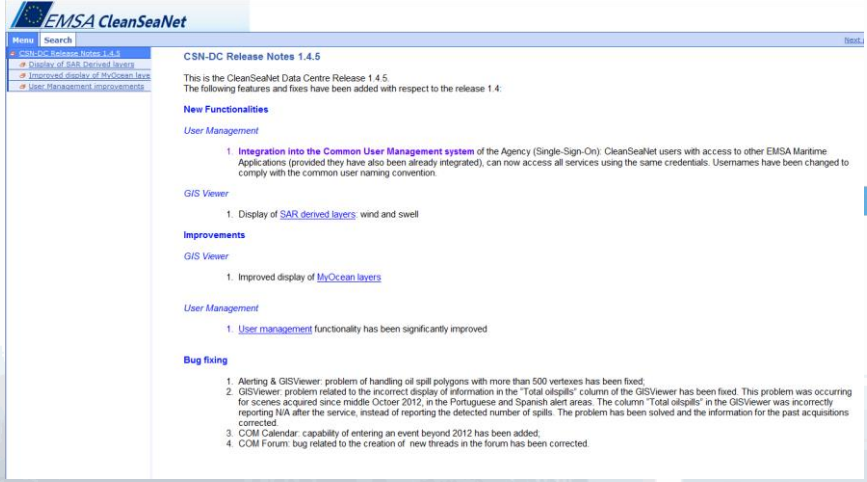
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CSN Web Portal



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CSN Web Portal

The Communication component

Forum

- Exchange of information

Wiki

- Common Knowledge database

Document Library


- For sharing for example training/USG meetings material
- eLearning material: starting...

Calendar

- For general CSN events

Entrance Points

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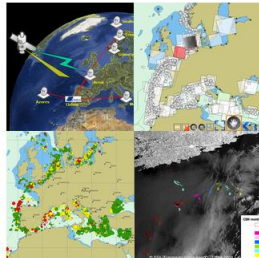
CSN Web Portal

The Wiki:

- FAQs
- Known Problems

CLEANSEANET WIKI

Front Page



Welcome to the CleanSeaNet 2nd Generation

This is the Communication component

This component has been developed for providing a platform of information exchange among the CleanSeaNet community.

We hope you find it useful for sharing your knowledge and experience on oil spill monitoring.


Please find the CSN-VO Training material in the Document Library

Please have a look on the CSN FAQ

NEW: Please have a look on CSN Known Problems

Add Child Page | 1 Attachments

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CSN Web Portal

FAQ Overview

With the following pages EMSA would like to time to time!

- [FAQ GIS-Viewer](#)
- [FAQ Planning](#)
- [FAQ Alerting](#)
- [FAQ Communications](#)
- [FAQ User Management](#)

Best regards, the CleanSeaNet Team

[Add Child Page](#) , [0 Attachments](#)

FAQ GIS-Viewer

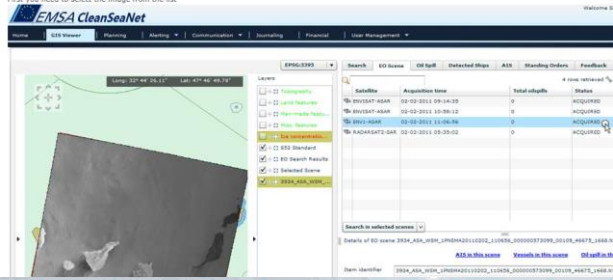
Questions

- How to access the image files?
- How to open the tiff files downloaded from the GISViewer?
- What is the difference between Class A and Class B spills?
- What are the arrow lines in the map of the GISViewer?
- Problem displaying the EPSG 4326 background map


Answers

How to access the image files?

First you need to select the image from the list



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CLEANSEANET WIKI

Problems Overview

Known problems in version v1.4 of CSN

The following issues have been identified in the current version of CleanSeaNet and are being handled by our Section:


1. GISViewer: Oil spill shapefile download: this function is available in Firefox but has a problem in Internet Explorer.
2. GISViewer: MyOcean layers not available for display.
3. GISViewer: Standing Order mechanism: Email and FTP work correctly, however SFTP does not work.
4. GISViewer: Upload of files in Feedback form does not work for Firefox
5. GISViewer: AIS data display: last 20 minutes of messages (from T0-10 to T0 +10, where T0 = acquisition time) is displayed with some delay, due
6. GISViewer: Sort of Feedbacks by "time" column does not work
7. GISViewer: Search using polygon defined by "Advanced Selection" tool is not working properly. The error is not always reproducible.

Last updated in: 19/09/2012 12:13:00 UTC

[Add Child Page](#) , [0 Attachments](#)


[Home](#) | [GIS Viewer](#) | [Planning](#) | [Alerting](#) | [Communication](#) | [Journaling](#) | [Financial](#) | [User Management](#)

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CSN Web Portal



Home | GIS Viewer | Planning | Alerting | **Communication** | User Management





CLEANSEANET DOCUMENT LIBRARY

Folders | My Documents | Recent Documents | Mail

Wiki
 Calendar
 Forum
Document Library


Search

Folder

-  **CleanSeaNet User Group Repository**
 This folder contains all documents related to CleanSeaNet User Group meetings
 Subfolders: [10th CleanSeaNet User Group meeting](#), [9th CleanSeaNet User Group meeting](#)
-  **Manuals**
 Subfolders: [CleanSeaNet 1st generation](#), [CleanSeaNet 2nd generation](#)
-  **PRIVATE**
-  **Training Material**
 This folder will provide more training information, training materials etc.
 Subfolders: [Trainings in 2010](#)


Showing 4 results.

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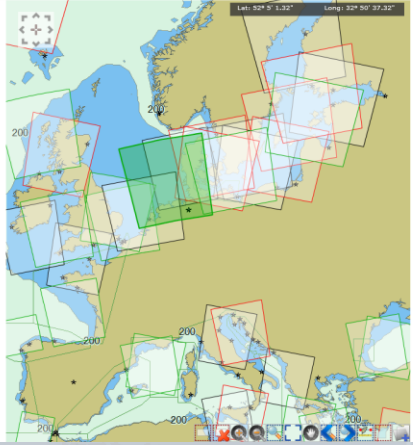
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CSN Web Portal The GISViewer



Home | **GIS Viewer** | Planning | Alerting | Communication | Journaling | Financial | User Management | Help | Release Notes

Welcome Sonia Pelaez!



Search	EO Scene	Oil Spill	Detected Ships	AIS	Standing Orders	Feedback	Alert Regions
Satellite	Acquisition time	Total oil spills	Status	41 rows retrieved			
Radarsat-2 SA...	03-10-2012 17:04:43	0	Delivered				
Radarsat-2 SA...	03-10-2012 16:45:55	0	Delivered				
Radarsat-2 SA...	03-10-2012 13:54:26	0	Delivered				
Radarsat-2...	03-10-2012 06:13:35	0	Delivered				
Radarsat-2 SA...	03-10-2012 04:37:29	4	Delivered				
RSI-SAR	03-10-2012 18:49:59	0	Delivered				
Radarsat-2...	03-10-2012 18:08:45	0	Delivered				
Radarsat-2...	03-10-2012 18:07:01	0	Delivered				
Radarsat-2...	03-10-2012 18:05:18	0	Delivered				
Radarsat-1...	03-10-2012 17:13:02	0	Delivered				
Radarsat-2 SA...	03-10-2012 16:21:40	6	Delivered				
Radarsat-2 SAR	03-10-2012 03:26:06	0	Delivered				

Search in selected scenes:

Details of EO scene 0

Item identifier: 123584

Acquisition start: 03-OCT-2012 17:28:44

Satellite: RADARSAT-1-SAR1

Polarisation:

Total oil spills:

Coastal states:

Filename:

Orbit Number: 90

Satellite opera...:

Usable area %:

Acquisition stop: 03-OCT-2012 17:29:58

Sensor Mode:

Orbit: A

Oil spills:

Feedback:

Frame id: 0

Service provider:

Coverage Com...:

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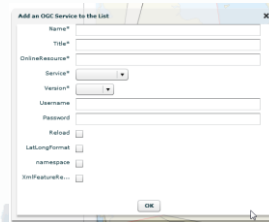
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The GISViewer

The GISViewer is the component to visualize the service results sent by the Service Providers, and Auxiliary Maritime Data – from EMSA, from CS or from other Data Centre.



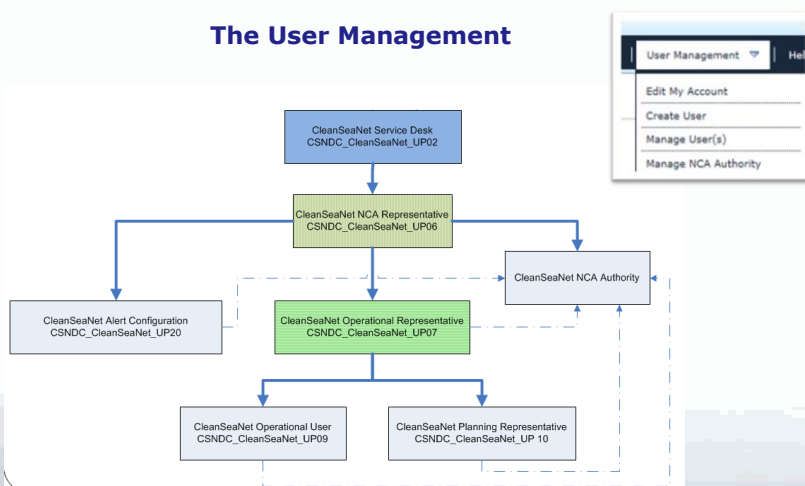
- Electronic Nautical Charts (ENC's) and DEMIS
- AIS from SafeSeaNet
- SAR Image
- Oil Spills and Vessels detected from SAR
- Alert areas
- Updated layers on Temperature, Chlorophyll, Sea currents, Ice (Baltic) from MyOcean
- Layers from national/regional WMS (Web Map Service) servers on request



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The User Management

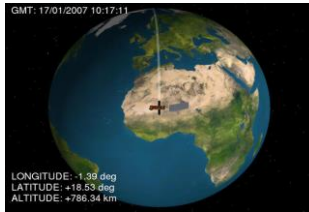
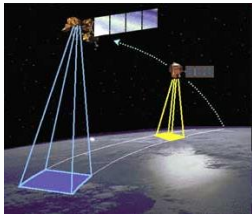


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The Product ORDERing tool (POR)

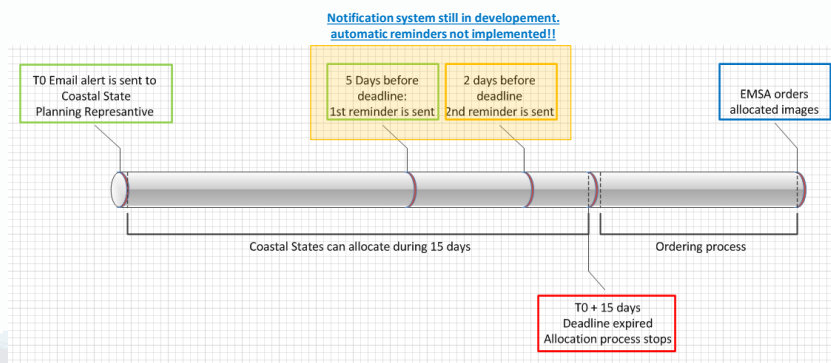
- Used for defining the number of EO scenes that will be used into the CSN-DC for the next tasking period.



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- The POR is the starting point of all CSN-DC activities
- EMSA uses the POR to communicate with satellite owners and service providers
- Coastal States provide the coverage requirements and the image allocations

There is a timeline for allocation



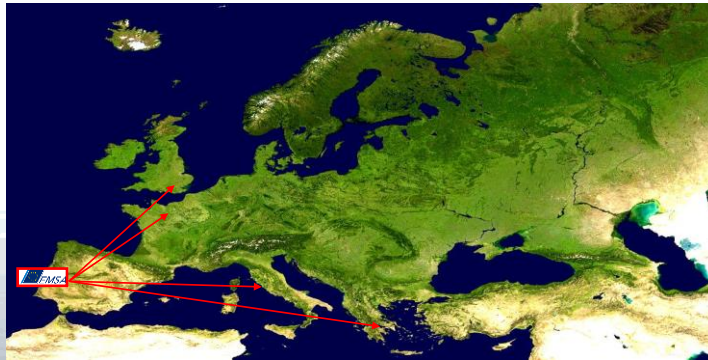
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During the 15 days of allocation Coastal states can at any time change the status of a specific scene. The Coastal State Planning Representative (UP10) is involved.

CSN Web Portal

The Alert System

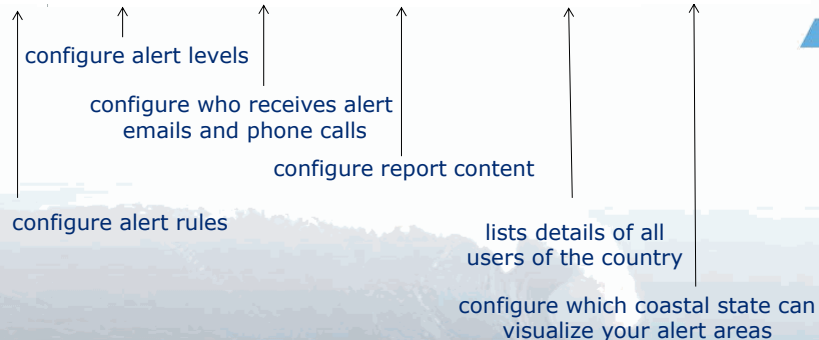
The alert is an automatic notification that is sent to the CSN end users by email upon certain circumstances. Typically an alert is distributed to a Coastal State of competence, when an oil spill is detected in the response area of the coastal state. Users can also be alerted by phone.



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The Alerting



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